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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,326

03/22/2004

Robert Griessbach

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EXAMINER

TRUONG, LOAN

ART UNIT

PAPER NUMBER

2114

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,326

Applicant(s)

GRIESSBACH, ROBERT

Examiner

LOAN TRUONG

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/22/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Greig et al. (US 4,607,365).

In regard to claim 1, Greig et al. disclosed a method of transmitting messages between a plurality of bus users, each of which is connected with a communication bus for exchanging messages, and including a diagnostic device for diagnosing a disturbance of the communication bus, the method comprising the acts of:

conducting a message transmission between two (*processor 10a, multiplexer 16a, fig. 1, 10a, 16a, col. 5 lines 38-41*) of the plurality of bus users (*processor transmit a message to the port through the multiplexer and it is determined through an echo back that the communication was successful, fig. 1, 10a, 26a, 16b, col. 5 lines 47-50*); and

for diagnosing the message transmission, operating in a diagnostic operating mode which differs from a normal operation, and asking by the diagnostic device a bus user receiving the message to output said message on the communication bus (*echo back diagnostic test, col. 5 lines 54-56*).

In regard to claim 2, Greig et al. disclosed the method according to claim 1, further comprising the acts of:

in the diagnostic operating mode (*echo back diagnostic test, col. 5 lines 54-56*), causing a third bus user to receive the message (*transmit message to multiplexer 16b, fig. 1, 16b, col. 5 lines 47-50*); and

reading-out a status of the message from the three bus users (*multiplexer is determined through an echo back that the communication was successful, col. 5 lines 47-50*).

In regard to claim 3, Greig et al. disclosed the method according to claim 1, wherein messages are transmitted between more than two bus users (*processor, multiplexer 16a, multiplexer 16b, fig. 1, 10, 16a-b, col. 5 lines 44-60*), the method further comprising the act of reading-out the status of the message for all bus users participating in the message transmission in an operating mode differing from the normal operation (*echo back diagnostic test, col. 5 lines 54-56*).

In regard to claim 4, Greig et al. disclosed the method according to claim 2, wherein messages are transmitted between more than two bus users, the method further comprising the act of reading-out the status of the message for all bus users participating in the message transmission in an operating mode differing from the normal operation (*echo back diagnostic test, col. 5 lines 54-56*).

In regard to claim 7, Greig et al. disclosed a diagnostic method for messages transmitted between bus users (*processor and multiplexer, fig. 1, 10, 16, col. 5 lines 38-43*), in which said bus users (*multiplexer, fig. 1, 16*) are each linked with a communication bus (*buses and multiplexer line, fig. 1, 12a-b, 22a-n, col. 5 lines 53*) for purposes of exchanging messages and with a diagnostic device for detecting a failure of the communication bus (*with echo back diagnostic test, processor can determine where in that communication path is the error, col. 5 lines 54-56*), wherein in a diagnostic operation mode that is different from a normal operation mode (*echo back diagnostic test, col. 5 lines 54-56*), a first bus user (*multiplexer, fig. 1, 16a, col. 5 lines 44-47*) receiving a message is requested by the diagnostic device (*processor, fig. 1, 10a, col. 5 lines 44-47*) to output said message (*echo back, col. 5 lines 47-50*) to the communication bus (*buses and multiplexer line, fig. 1, 12a-b, 22a-n, col. 5 lines 53*), thereby diagnosing the message transmission between two bus users (*determine through echo back that the communication between processor 10a and multiplexer 16b was successful, col. 5 lines 47-50*).

In regard to claim 8, Greig et al. disclosed the method according to claim 7, wherein in the diagnostic operation mode (*echo back diagnostic test, col. 5 lines 54-56*), a third bus user is caused to receive the message (*transmit message to multiplexer 16b, fig. 1, 16b, col. 5 lines 47-50*), and further wherein a status of the message is read out from each of the three bus users (*multiplexer is determined through an echo back that the communication was successful, col. 5 lines 47-50*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greig et al. (US 4,607,365) in further view of McIntyre et al. (US 6,272,113).

In regard to claim 5, Greig et al. does not teach the method according to claim 3, wherein the bus users participating in the message transmission are read-out of a table.

McIntyre et al. teach the method of network controller system that uses multicast heartbeat with the implementation of a port state table where the intermediate driver periodically updates the status table based on received and processed packets H1-H2 for each of the ports P1-P4 (*Table 1, col. 10 lines 33-59*).

It would have been obvious to modify the method of Greig et al. by adding McIntyre et al. method of network controller system that uses multicast heartbeat. A

person of ordinary skill in the art at the time of applicant's invention would have been motivated to make the modification because it would improve the network efficiency and fault tolerance of a network in a practical and cost effective manner to display the status and configuration of each port in an accurate and efficient manner (*col. 1 lines 60-63*).

In regard to claim 6, Greig et al. does not teach the method according to claim 4, wherein the bus users participating in the message transmission are read-out of a table.

McIntyre et al. teach the method of network controller system that uses multicast heartbeat with the implementation of a port state table where the intermediate driver periodically updates the status table based on received and processed packets H1-H2 for each of the ports P1-P4 (*Table 1, col. 10 lines 33-59*).

Refer to claim 5 for motivational statement.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

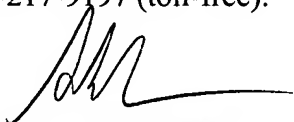
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loan Truong whose telephone number is (571) 272-2572. The examiner can normally be reached on M-F from 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2114

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Loan Truong
Patent Examiner
AU 2114



SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER